# Operator's Safety and Service Manual GP4000 GP5500

It is the OWNER'S RESPONSIBILITY to communicate information on the SAFE USE and OPERATION of this machine to the operators!



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## MBW INC.

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# **TABLE OF CONTENTS**

SAFETY PRECAUTIONS	1
SAFETY NOTICE & DECALS	2
SAFETY DECAL LOCATIONS	3
WARRANTY	4
MBW WAREHOUSE LOCATIONS	5
SPECIFICATIONS	6
SERIAL NUMBER LOCATION	7
PARTS ORDERING PROCEDURE	7
OPERATING INSTRUCTIONS	8
SERVICE INSTRUCTIONS	10
DISASSEMBLY INSTRUCTIONS	12
ASSEMBLY INSTRUCTIONS	14
REPLACEMENT AND TOLERANCE CHART	16
TORQUE CHART	16
EXCITER ASSEMBLY	18
PLATE ASSEMBLY	20
HONDA ENGINE ASSEMBLY – GP4000	22
ROBIN ENGINE ASSEMBLY – GP5500	23
HONDA ENGINE ASSEMBLY – GP5500	24
YANMAR ENGINE ASSEMBLY – GP5500	25
ROLL CAGE ASSEMBLY	26

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READ AND STUDY THE FOLLOWING SAFETY INFORMATION BEFORE ATTEMPTING TO OPERATE THIS EQUIPMENT. IN ADDITION, ENSURE THAT EVERY INDIVIDUAL WHO OPERATES OR WORKS WITH THIS EQUIPMENT IS FAMILIAR WITH THESE SAFETY PRECAUTIONS.

#### **WARNING - LETHAL EXHAUST GAS!**

An internal combustion engine discharges carbon monoxide, a poisonous, odorless invisible gas. Death or serious illness may result if inhaled. Operate only in an area with good ventilation, **NEVER IN A CONFINED AREA!** 

#### **WARNING – DANGEROUS FUELS!**

Use extreme caution when storing, handling and using fuels — they are highly volatile and explosive in vapor state. Do not add fuel while engine is running. Stop and cool the engine before adding fuel. **DO NOT SMOKE!** 

#### SAFETY GUARDS

It is the owner's responsibility to ensure **ALL GUARDS AND SHIELDS** are in place and in working order.

#### **IGNITION SYSTEMS**

Breakerless, magneto and battery ignition systems **CAN CAUSE SEVERE ELECTRICAL SHOCKS**. Avoid contacting these units or their wiring.

#### SAFE DRESS

**DO NOT WEAR** loose clothing, rings, wristwatches, etc., near machinery.

#### NOISE PROTECTION

Wear O.S.H.A. specified hearing protection devices.

#### **FOOT PROTECTION**

Wear O.S.H.A. specified steel tip safety shoes.

#### **HEAD PROTECTION**

Wear O.S.H.A. specified safety helmets.

#### **EYE PROTECTION**

Wear O.S.H.A. specified eye shields, safety glasses, and sweat bands.

#### **OPERATOR**

Keep children and bystanders off and away from the equipment.

#### **REFERENCES**

For details on safety rules and regulations in the United States, contact your local Occupational Safety and Health Administration (O.S.H.A.) office. Equipment operated in other countries must be operated and serviced in accordance and compliance with any and all safety requirements of that country. The publication of these safety precautions is done for your information. MBW Inc. does not by the publication of these precautions, imply or in any way represent that these are the sum of all dangers present near MBW equipment. If you are operating MBW Inc. equipment, it is your responsibility to insure that such operation is in full accordance with all applicable safety requirements and codes. All requirements of the United States Federal Occupational Safety and Healthy Administration Act must be met when operated in areas that are under the jurisdiction of that United States Department.

## **SAFETY NOTICE & DECALS**



## IMPORTANT NOTICE



The "SAFETY ALERT SYMBOL" is used to call attention to items or operations that may be dangerous to those operating or working with this equipment. The symbol can be found throughout the manual and on the unit itself. Please read these warnings carefully.

## **READ SAFETY DECALS CAREFULLY**

Carefully read and follow all safety decals. Keep them in good condition. If decals become damaged, replace as required. If repainting, **REPLACE ALL** decals. Decal Kits are available from authorized MBW Distributors.

# **₩** WARNING

When lifting, use handle bars located at base of plate.

Approximate weight:

AP2000: 175 lbs. (80 kg)
GP3000-15: 215 lbs. (98kg)
GP3000: 250 lbs. (114kg)
GP4000: 239 lbs. (108 kg)
GP5500: 282 lbs. (128 kg)

#13478, EXCITER HOUSING

## PLATES OPERATING INSTRUCTIONS

- Check engine oil.
- Open fuel valve.
- Choke engine. A warm engine may not need to be choked.
- Open throttle part way.
- Pull starter rope.
- After starting: open choke, return throttle to idle position.
- During operation, when excessive kickback is noticed, maximum compaction has been reached.
- To stop: Return throttle to idle position, use engine stop switch, close fuel valve.

#13482, BELTGUARD / DECK



ROTATING PARTS Keep hands away!

#13484, ON BELTGUARD



Read the Operating Instructions before operating this piece of equipment.

Keep unauthorized and untrained people away from this equipment.

**ROTATING & MOVING PARTS!** Make sure all guards and safety devices are in place.

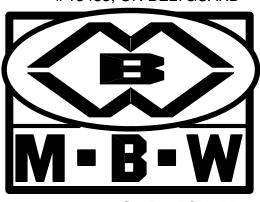
**DO NOT RUN** this machine in an enclosed area. The engine produces carbon monoxide, a **POISONOUS GAS**.

Wear approved hearing protection, foot protection, eye protection and head protection.

**SHUT OFF** the engine before servicing, cleaning or adding fuel.

Failure to comply could result in serious bodily injury.

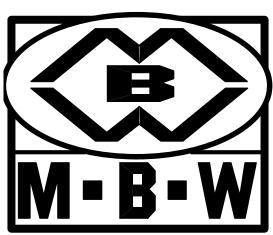
#13483, ON BELTGUARD



#01064, ON BELTGUARD



#01069, THROTTLE LEVER



12878

#12878, ON EXCITER HOUSING



HOT SURFACE DO NOT TOUCH

SURFACE CHAUDE NE PAS TOUCHER

#09311, EXCITER HOUSING

## SAFETY DECAL LOCATIONS



When lifting, use handle bars located at base of plate.

Approximate weight:

AP2000: 175 lbs. (80 kg)
GP3000-15: 215 lbs. (98kg)
GP3000: 250 lbs. (114kg)
GP4000: 239 lbs. (108 kg)
GP5500: 282 lbs. (128 kg)

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#13478, ON EXCITER HOUSING



#09311, EXCITER HOUSING



#13484, ON BELTGUARD



#01064, ON BELTGUARD

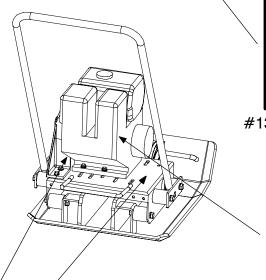


#12878, ON EXCITER HOUSING

# PLATES OPERATING INSTRUCTIONS

- 1. Check engine oil.
- Open fuel valve.
- 3. Choke engine. A warm engine may not need to be choked.
- 4. Open throttle part way.
- 5. Pull starter rope.
- 6. After starting: open choke, return throttle to idle position.
- During operation, when excessive kickback is noticed, maximum compaction has been reached.
- To stop: Return throttle to idle position, use engine stop switch, close fuel valve. 1348;

#13482, ON BELTGUARD GP5500, ON DECK GP4000



**CAUTION** 

Read the Operating Instructions before operating this piece of equipment.

Keep unauthorized and untrained people away from this equipment.

ROTATING & MOVING PARTS! Make sure all guards and safety devices are in place.

DO NOT RUN this machine in an enclosed area. The engine produces carbon monoxide, a POI-SONOUS GAS.

Wear approved hearing protection, foot protection eye protection and head protection.

SHUT OFF the engine before servicing, cleaning of adding fuel.

Failure to comply could result in serious bodil injury.

#13483, ON BELTGUARD



#01069, ON THROTTLE LEVER

## WARRANTY

#### WARRANTY

#### THIS IS YOUR WARRANTY - PLEASE READ AND SAVE

- MBW Inc., Slinger Wisconsin, warrants each new machine against defects in material and workmanship under normal use and service for a period of six (6) months. This warranty commences the first day the machine is sold, assigned to a rental fleet, or otherwise put to first use.
- The obligation under this warranty is limited to the replacement or repair of parts and/or machine at MBW Inc. factory branches or at authorized MBW Inc. Distributors.
- Machines altered or modified without MBW Inc. written consent voids this warranty. Misuse, negligence, accidents or the operation of machines in any way other than recommended by MBW Inc. will void this warranty. This warranty shall not apply to machines repaired by other than MBW Inc. factory branches or authorized MBW Inc. Distributors.
- This warranty includes labor on all MBW Inc. products. Labor must be performed at an authorized MBW Inc. Distributor.
- 5. The cost of transportation and other expenses connected therewith are not covered by this warranty.
- Written authorization for the return of merchandise under warranty must be obtained from MBW Inc., Slinger, Wisconsin. In England: MBW (UK) LIMITED, Bradley Fold Trading Estate Unit 6, Radcliffe Moor Road, Bolton BL2 6RT.
- 7. MBW Inc. reserves the right to inspect and render final decision on each warranty case.
- 8. **MBW Inc.** reserves the right to improve or make product changes without incurring any obligation to update, refit, or install the same on machines previously sold.
- MBW Inc. is not responsible for any liability or damage or injury directly or indirectly from design, material or operation of its products.
- 10. Warranty card must be returned to MBW Inc., P.O. Box 440, Slinger, Wisconsin 53086—0440, within 10 days after purchase, assignment to a rental fleet, or first use. In England: MBW (UK) LIMITED, Bradley Fold Trading Estate Unit 6, Radcliffe Moor Road, Bolton BL2 6RT. Failure to return warranty card as specified renders the warranty null and void.
- 11. Requests for warranty must be submitted in writing within 30 days after machine failure to **MBW Inc.**, P.O. Box 440, Slinger, Wisconsin 53086–0440. In England: MBW (UK) LIMITED, Bradley Fold Trading Estate Unit 6, Radcliffe Moor Road, Bolton BL2 6RT.
- 12. THE FOREGOING WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR USE, AND OF ALL OTHER OBLIGATION OR LIABILITIES ON OUR PART, AND WE NEITHER ASSUME NOR AUTHORIZE ANY OTHER PERSON TO ASSUME FOR US ANY OTHER LIABILITY OR WARRANTY IN CONNECTION WITH THE SALE OR SERVICE OF ANY OF OUR PRODUCTS. LIKEWISE, THIS WARRANTY SHALL NOT APPLY WITH RESPECT TO ENGINES, MOTORS AND OTHER COMPONENT PARTS PRODUCED BY OTHER MANUFACTURERS AND USED ON MBW PRODUCTS, BUT SUCH ITEMS SHALL HAVE SUCH WARRANTIES AS MAY BE PROVIDED BY THE MANUFACTURER THEREOF.



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## MBW WAREHOUSE LOCATIONS



MBW Inc. has established a network of reputable Distributors with trained mechanics and full facilities for maintenance and rebuilding, and to carry an adequate parts stock in all areas of the country. Their sales engineers are available for professional consultation. If you cannot locate an MBW Inc. Distributor in your area, contact one of our Sales Branches or MBW Inc. The locations and phone numbers of the Sales Branches are listed below.

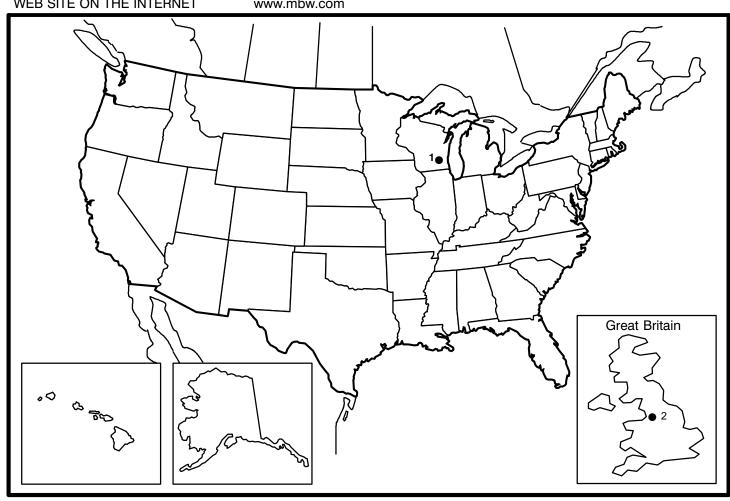
Remember — you own the best. If repairs are needed use only MBW Inc. parts purchased from Authorized MBW Inc. Distributors.

#### Sales Branches:

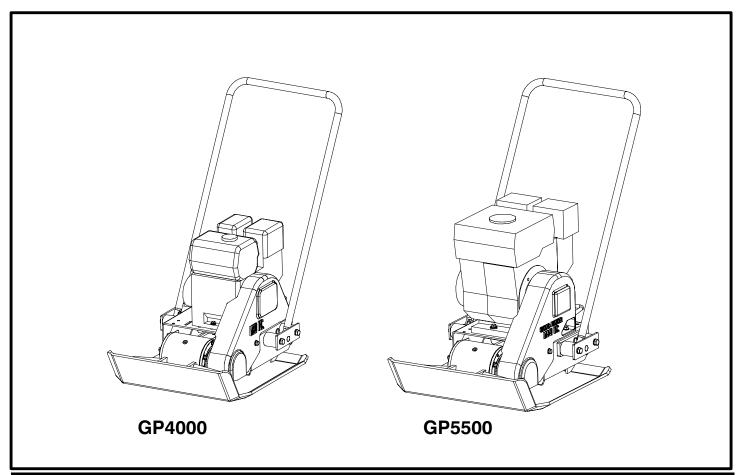
1. MBW Inc. 250 Hartford Rd. P.O. Box 440 Slinger, WI 53086-0440 Phone: (262) 644-5234 FAX: (262) 644-5169 2. MBW (UK) LIMITED

Units 2 & 3 Cochrane Street Bolton BL3 6BN, England Phone: 01204 387784 FAX: 01204 387797

E-MAIL ON THE WORLD WIDE WEB mbw@mbw.com WEB SITE ON THE INTERNET www.mbw.com



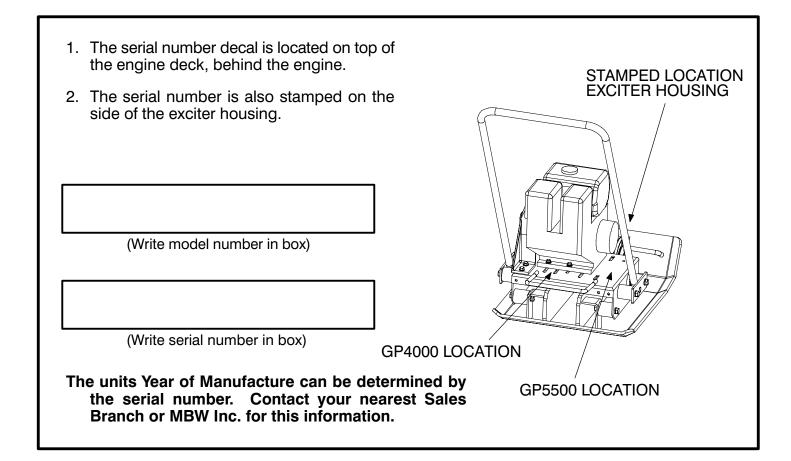
## **SPECIFICATIONS**



	UNITS	GP4000H	GP5500H	GP5500R	GP5500Y
Operating Weight	lbs (kg)	224 (102)	275 (125)	273 (124)	287 (130)
Plate Size —	in	21 X 25	23 X24	23 X 24	23 X 24
WxL	(cm)	(53 X 64)	(58 X 61)	(58 X 61)	(58 x 61)
Compaction Force	lb (kg)	4200 (1905)	5800 (2610)	5800 (2610)	5800 (2610)
Exciter Speed	vpm	4700	4700	4700	4700
Compaction Depth	in (cm)	18 (47)	20 (51)	20 (51)	20 (51)
Travel Speed (Fwd, Rev)	ft/min (m/min)	130 (38)	130 (38)	130 (38)	130 (38)
Operating Noise Level <sup>1</sup>	dBA @ operator's ear	902-983	90 <sup>2</sup> -98 <sup>3</sup>	90 <sup>2</sup> -98 <sup>3</sup>	90 <sup>2</sup> -98 <sup>3</sup>
Compaction Area	sqft/h (sqm/h)	13650 (1268)	14950 (1450)	14950 (1450)	14950 (1450)
Normal Operating Engine Speed <sup>4</sup>	rpm	3400	3400	3400	3400
Engine Idling Speed <sup>5</sup>	rpm	1200	1200	1200	1200
Engine Model		Honda GX160	Honda GX270	Robin EX27	Yanmar Diesel L60E-D
Power Rating @ Normal Operating Speed	hp (kW)	5.5 (4.1)	8 (6)	8 (6)	6 (4.5)

- 1. Noise levels are based on operating conditions. Background noise will increase noise levels.
- 2. Unit operating on loose gravel surface material.
- 3. Unit operating on highly compacted coarse gravel surface material. Hearing protection is recommended and may be required by law. It is the users responsibility to assess the noise level at the operation site and determine whether hearing protection is required.
- 4. Normal motor operating speed is factory preset. If this needs adjustment contact your nearest MBW Sales Branch, or MBW Inc.
- 5. Motor idle speed is factory preset and adjustment should not be required. If the unit needs adjustment refer to the engine owner's manual.

## SERIAL NUMBER LOCATION



## PARTS ORDERING PROCEDURE

The Warranty is stated in this book on page NO TAG. Failure to return Warranty Registration Card renders the Warranty null and void.

An "Owner's Manual" for the engine is also furnished. Engine parts may be ordered from any authorized dealer. Refer to the engine "Owner's Manual" for exploded views and part identifications.

#### PARTS ORDERING:

MBW Inc. parts are available worldwide and must be ordered through your local MBW Inc. Distributor. If you cannot locate an MBW Inc. Distributor in your area, refer to page NO TAG of this manual to locate the MBW Inc. Sales Branch nearest you and call for assistance.

#### **ALWAYS INCLUDE:**

- 1. Model and Serial Number of machine when ordering MBW Parts.
- 2. Model and Serial Number of engine when ordering Engine Parts.
- 3. Item Part Number, Description, and Quantity.
- 4. Company Name, Address, Zip Code, and Purchase Order Number.
- 5. Preferred method of shipping.

REMEMBER — you own the best. If repairs are needed use only MBW Inc. parts purchased from Authorized MBW Inc. Distributors.

## OPERATING INSTRUCTIONS

## INTRODUCTION

MBW Inc. Compaction Equipment is intended for use in very severe applications. They are powered by four cycle engines and are available in different sizes and a selection of engines.

This parts manual contains only standard or standard option parts. Variations of these parts as well as other special parts are not included. Contact your local MBW, Inc. Distributor for assistance in identifying parts not included in this manual.

## **BEFORE OPERATION**



- Check for damage to unit upon initial receipt and startup.
- REMEMBER! It is the owner's responsibility to communicate information on the safe
  use and proper operation of this unit to the operators.
- Before operating, review **SAFETY PRECAUTIONS** listed on page 1 of this manual.
- Familiarize yourself with the operation of the unit and confirm that all controls function properly BEFORE starting engine.
- Know how to STOP the unit.
- Make sure hands, feet, and clothing are at a safe distance from any moveable parts prior to starting.
- OIL LEVEL Check the oil level in the engine. For more information see Engine oil
  in the engine "Owner's Manual".
- AIR CLEANER Check to ensure element is in good condition and properly installed.
   Clean filter element if it's clogged. Replace it if it's damaged.
- **FUEL SUPPLY** The engines on MBW Inc. Compaction equipment require a high grade of clean, fresh, unleaded gasoline.
- FUEL FILTER Check to ensure element is in good condition. Replace it if it's clogged or damaged.

#### STARTING ENGINE

For detailed instructions refer to engine Owner's Manual.

- 1. Open throttle slightly. <u>WARNING!!</u> The engine speed must NOT be high enough to engage the clutch!
- 3. Open fuel valve.
- 4. Turn engine switch to the "On" position.
- 5. Pull starter rope.
- 2. Choke engine if necessary. (You may not need to choke a warm engine.)
- 6. After engine starts, move choke lever back to open position.

#### **OPERATING**

- 1. After engine warms up, pull throttle lever to accelerate engine speed. Plate will begin vibrating and move forward. **There is no neutral position.**
- 2. Run the unit on the ground being compacted until excessive kickback is noticed or when in-
- dicated by soil testing methods. DO NOT operate on extremely hard surfaces such as concrete.
- When working on sloped surfaces, hitch a towing rope to the compactor and have an assistant help pull the compactor uphill.

#### **STOPPING**

- 1. Move throttle lever to idle position and allow engine to return to an idle speed.
- 2. Turn the engine switch on the Honda Engine to

the "Off" position.

3. Close fuel valve



#### STOP THE ENGINE BEFORE:

- ADDING FUEL OR OIL
- LEAVING EQUIPMENT UNATTENDED, FOR ANY AMOUNT OF TIME
- MAKING ANY REPAIRS OR ADJUSTMENTS TO UNIT

#### LIFTING/TRANSPORTATION

- The unit may be lifted by the handles provided on the front of the plate and the handle in the back of the unit on the deck. If your unit has a roll cage, it may be lifted by the upper section of the roll cage. DO NOT lift the unit by the handle as it may cause injury or damage.
- The unit should be transported in the upright position and secured or tied down by the roll cage or handles provided on the plate. DO NOT lay the machine on its sides or top.

## SERVICE INSTRUCTIONS



NEVER attempt to service or lubricate unit with engine running.

After servicing unit, restore and fasten all Guards, Shields, and Covers to their original positions BEFORE resuming operation.

Do not drain oil onto ground, into open streams, or down sewage drains.

#### CHECKING EXCITER DRIVE BELT

Refer to FIGURE 3, page 20.

- 1. Remove beltguard (item #15).
- 2. Replace drive belt if it is damaged or cracked.
- Apply moderate thumb pressure to the drive belt halfway between the pulleys. The belt should deflect approximately 3/8"(9mm).
   NOTE: If the shockmounts (item #2) move, apply less pressure.
- 4. If belt deflects more than 3/8"(9 mm), it must be tightened. To tighten belt, loosen the four engine mounting screws. Pull the engine back and retighten the four screws.
- 5. Repeat step 3.
- 6. When proper belt deflection is reached, reinstall beltguard.

#### CHECKING EXCITER OIL

Change Exciter Oil every year or 500 hours, whichever comes first. MBW recommends the use of its own Ground Pounder® Exciter Oil exclusively (see Exciter Oil, page 16). Failure to do so could result in premature exciter failure.

- 1. Clean debris from exciter housing and plate. Place unit on a flat. level surface.
- 2. Remove bolt on exciter cover (see FIGURE 1).
- 3. The oil level should be up to the bottom of the bolt hole. If oil level is low, add Ground Pounder® Exciter Oil.
- 4. Allow excess oil to run out.
- 5. Reinstall bolt using Teflon sealant.
- 6. Discard oil and other contaminated debris in a proper container.

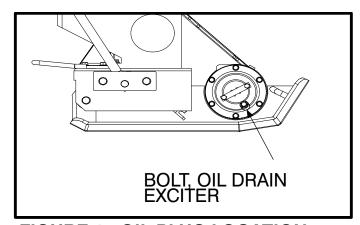


FIGURE 1: OIL PLUG LOCATION

#### CHANGING EXCITER OIL

MBW recommends the use of its own Ground Pounder® Exciter oil exclusively (see Exciter Oil, page 16). Failure to do so could result in premature exciter failure.

- 1. Clean debris from exciter housing and plate. Place unit on a flat, level surface.
- 2. Remove bolt on exciter cover (see FIGURE 1, page 10).
- 3. Tilt the unit 90° on its side so the oil drains into a container.
- 4. Tilt unit to an upright position and clean excess oil off the unit. DO NOT allow any debris into the housing.

- 5. Pour 6 oz. of Ground Pounder® Exciter Oil into exciter housing.
- 6. Allow excess oil to run out.
- 7. Reinstall bolt using Teflon sealant.
- 8. Discard oil and other contaminated debris in a proper container.

#### **CLEANUP**

- 1. Clean dirt and debris from Ground Pounder® daily.
- 2. Replace any decals that become damaged.
- 3. If repainting Ground Pounder®, **BE SURE that ALL DECALS** which apply to your unit are masked properly or replaced.

## DISASSEMBLY INSTRUCTIONS



CAUTION: Assembly and Disassembly should be performed by a service technician who has been factory trained on MBW Inc. equipment.

The unit should be clean and free of debris, especially around the exciter housing cover. Steam cleaning is recommended.

#### **ENGINE REMOVAL**

- 1. Remove beltguard.
- 2. Remove the four engine mounting screws and mounting bars.
- 3. Remove belt from engine.
- 4. Lift engine off.

#### **EXCITER DISASSEMBLY**

#### Refer to FIGURE 2, page 18.

- 1. Clean the housing and drain the oil (see CHANGING EXCITER OIL, page 11).
- Remove pulley (item #1) and key (item #8) for GP4000. Remove the tapered bushing (item #13) and sheave (item #12) for GP5500. Refer to FIGURE 3, page 20.
- 3. Remove six bolts (item #15) from exciter cover.
- 4. Install two of the bolts you just removed, into the holes with plugs. Run them in evenly as far as you can, this will remove the cover and the exciter shaft assembly.
- 5. Remove cover gasket (item #4).

- 6. Remove seal (item #8) from cover. (You will destroy the seal)
- 7. Remove retaining ring (item #11) and press out exciter shaft (item #5) from the cover.
- 8. Remove retaining ring (item #2) and press out the bearing (item #9) from the cover.
- Remove six bolts (item #15) from exciter cover on other side.
- 10. Repeat steps 4 and 5.
- 11. Remove retaining ring (item #2) and press out the bearing (item #7) from the cover.

#### HANDLE DISASSEMBLY

#### Refer to FIGURE 3, page 20.

1. Remove cotter pins (item #5).

with lockwashers (item #23) from handle brackets (item #11).

- 2. Unscrew the hex head cap screws (item #21)
- 3. Remove the handle.

#### **DECK REMOVAL**

#### Refer to FIGURE 3, page 20.

- #21) with lockwashers (item #23).
- 1. Remove four hex head cap screws (item #20 & 2. Lift deck from housing assy (item #16).

## ASSEMBLY INSTRUCTIONS



Prior to assembly wash all parts in a suitable cleaner or solvent.

Check moving parts for wear and failure. Refer to REPLACEMENT AND TOLERANCE CHART for tolerances and replacement cycles.

Replace all seals and gaskets at every overhaul or disassembly.

For torque settings other than those listed, see torque chart.

#### **EXCITER ASSEMBLY**

#### Refer to FIGURE 2, page 17.

- 1. Press bearing (item #7) into cover (item #10). Then, install retaining ring (item #2) into position.
- 2. Apply a thin layer of grease to outer flange and put a new gasket (item #4) in place.
- 3. Press this assembly, into the housing assembly (item #12). **Be sure to place oil drain in the down position.** Then, install the six flange whiz—lock screws (item #15).
- 4. Press bearing (item #9) into cover (item #6). Then, install retaining ring (item #2) into position.

- Press exciter shaft (item #5) into cover assembly. Then, install retaining ring (item #11) into position.
- 6. Press a new seal (item #8) into cover (item #6).
- 7. Press this assembly, into the housing assembly (item #12). Then, install the six flange whiz–lock screws (item #15).
- 8. Install pulley (item #1, fig. 3) and key (item #8, fig 3) for **GP4000**. Install the tapered bushing (item #13, fig 3) and sheave (item #12, fig 3) for **GP5500**.

#### **DECK ASSEMBLY**

#### Refer to FIGURE 3, page 19.

- 1. Install the two hex head cap screws (item #21) with lockwashers (item #23) into the front mounts.
- Install the remaining two hex head cap screws (item #21) with lockwashers (item #23) into the rear mounts.

#### **HANDLE ASSEMBLY**

#### Refer to FIGURE 3, page 19.

- 1. Install handle brackets (item #11) onto the handle.
- 2. Install hex head cap screws (item #21) with

lockwashers (item #23).

3. Install cotter pins (item #5). Make sure nylon bushings (items #3 & #4) are in place.

#### **ENGINE ASSEMBLY**

- 1. Place engine on deck.
- 2. Install four engine mounting screws and mounting bars. **DO NOT TIGHTEN**
- 3. Install the drive belt.
- 4. Refer to checking exciter drive belt section on page 10 and do steps 2 thru 6.

## REPLACEMENT AND TOLERANCE CHART

Part TOLERANCE OR REPLACEMENT CYCLE

Air Cleaner Element Replace after 50 hours if engine is operating under good clean air

conditions. Service and replace more frequently if under extremely

dusty or dirty conditions.

**Bearings** Replace anytime a Bearing is rough, binding or discolored.

**Clutch** Replace the Clutch if the Shoes and Spring show signs of heat dam-

age or if the Clutch engages below 2000 rpm.

**Exciter Oil** Replace once every season or every 500 hours. Use 6 ounces of oil

from the 6-pack of MBW #01058 Ground Pounder® Exciter Oil.

**Hardware** Re-torque all bolts after the first eight hours of operation and **check** 

every 25 hours.

Seals and Gaskets Replace at every overhaul or teardown and when exciter is rebuilt.

**Spark Plug** See the engine manufacturer's Operator's Manual.

Special MBW Tools and Kits #00134 Universal Load Cart

#01058 6-Pack Ground Pounder® Exciter Oil

#01603 Kit, Decal GP4000/5500

#01629 Test Mat, Rubber

#02484 Kit, Roll Cage GP5500 #07585 Kit, Gasket and Seal

#13907 Kit, Roll Cage GP4000

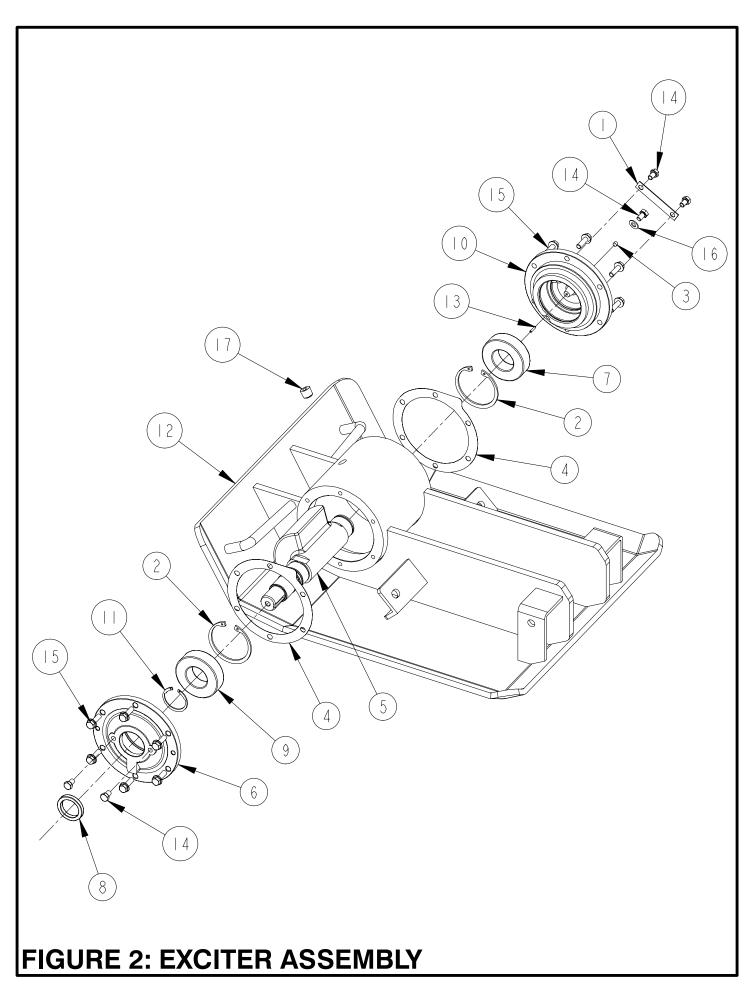
Safety Decals Replace if they become damaged or illegible.

## **TORQUE CHART**

<u>CONVERSIONS</u>	<u>E</u>	<u> TIGHTENING TORQ</u> I	
	GRADE5	GRADE 2	SIZE
in lbs $x 0.083 = \text{ft-lbs}$	40 in-lb	32 in-lb	10-24
	32 in-lb	32 in-lb	10-32
ft lbs x $12 = in-lbs$	115 in-lb	70 in-lb	1/4-20
	140 in-lb	85 in-lb	1/4-28
ft lbs x $0.1383 = kg-m$	250 in-lb	150 in-lb	5/16-18
	270 in-lb	165 in-lb	5/16-24
ft lbs x 1.3558 = N●m	35 ft-lb	260 in-lb	3/8-16
	40 ft-lb	300 in-lb	3/8-24
	55 ft-lb	35 ft-lb	7/16-14
	75 ft-lb	45 ft-lb	7/16-20
	80 ft-lb	50 ft-lb	1/2-13
	105 ft-lb	70 ft-lb	1/2-20

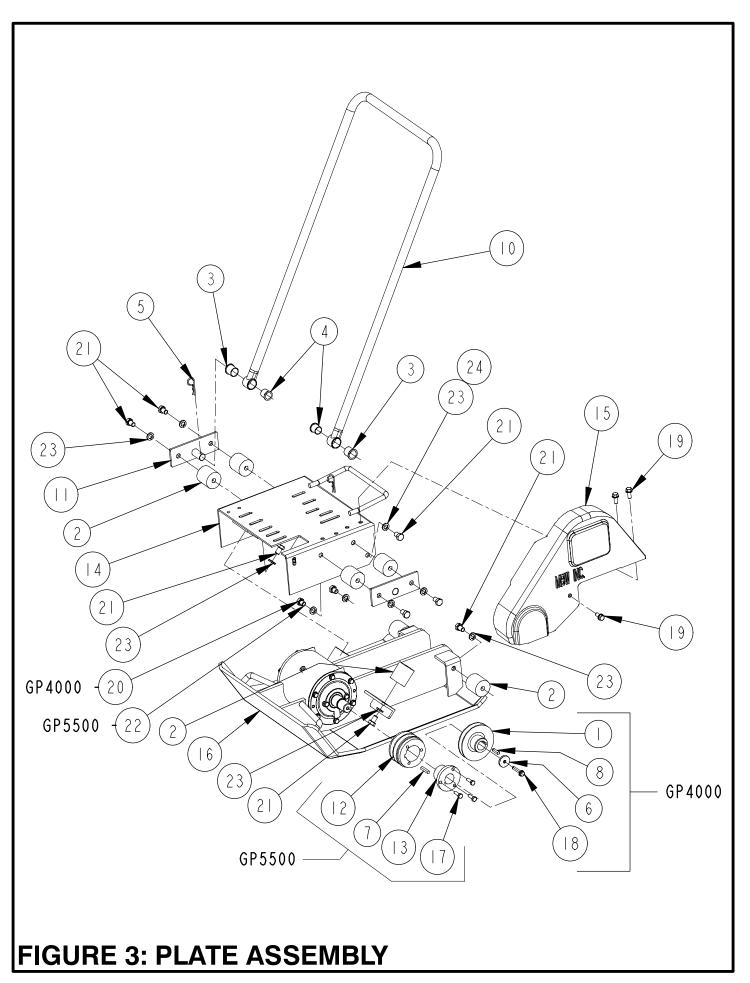
REMEMBER — you own the best. If repairs are needed use only MBW Inc. parts purchased from Authorized MBW Inc. Distributors.

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# **EXCITER ASSEMBLY**

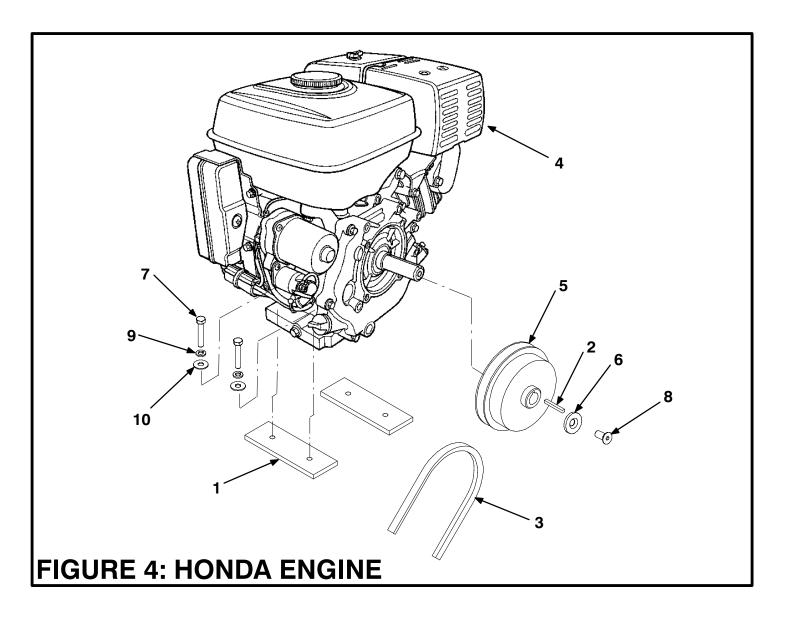
ITEM NO	PART NO	DESCRIPTION	QTY
1.	00066	FILTER RETAINER	1
2.	01000	INTERNAL RETAINING RING	2
3.	01072	FILTER	1
4.	06098	GASKET	2
5.	07446	EXCITER SHAFT (GP5500)	1
	12822	EXCITER SHAFT (GP4000)	1
6.	07455	FRONT COVER	1
7.	07456	CYLINDRICAL ROLLER BEARING	1
8.	07457	OIL SEAL	1
9.	07458	SPHERICAL ROLLER BEARING	1
10.	07460	REAR COVER	1
11.	07469	EXTERNAL RETAINING RING	2
12.	13856	EXCITER HOUSING (GP4000)	1
	13857	EXCITER HOUSING (GP5500)	1
13.	F0205SP	SPIROL PIN, 1/8" x 5/8"	1
14.	F051804HCS	HEX HEAD CAP SCREW, 5/16-18 x 1/2"	5
15.	F051808FWS	FLANGE WHIZ-LOCK SCREW, 5/16-18 x 1"	12
16.	F05BFW	BRASS FLAT WASHER, 5/16"	1
17.	F0618SPP	SOCKET PIPE PLUG, 3/8-18	1
18.			
19.			
20.			
21.			
22.			
23.			
24.			
25.			
26.			
27.			
28.			
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31.			
32.			



# **PLATE ASSEMBLY**

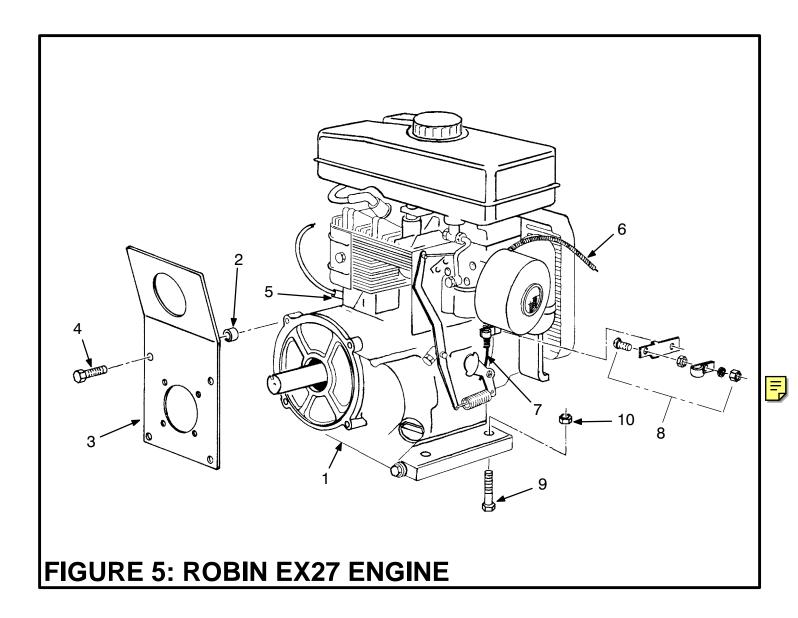
ITEM NO	PART NO	DESCRIPTION	QTY
1.*	00003	EXCITER PULLEY	1
2.	01011	SHOCKMOUNT	8
3.	01018	OUTER NYLON BUSHING	2
4.	01019	INNER NYLON BUSHING	2
5.	01056	HAIRPIN	2
6.*	01099	WASHER	1
7.**	01161	KEY, 1/4" x 1/4" x 1-1/2"	1
8.*	01283	KEY, 1/4" x 1/4" x 1-1/4"	1
9.**	02715	HANDLE SPACER (NOT SHOWN BETWEEN DECK AND SHOCKMOUNTS)	2
10.	02717	HANDLE ASSEMBLY (Includes items 3 & 4)	1
11.	06921	HANDLE BRACKET	2
12.**	07452	TWO GROOVE SHEAVE	1
13.**	07453	SPLIT TAPER BUSHING	1
14.	12637	ENGINE DECK	1
15.	12832	BELTGUARD (GP4000)	1
	12879	BELTGUARD (GP5500)	1
16.	13861	EXCITER & PLATE ASSEMBLY (GP4000)	1
	13862	EXCITER & PLATE ASSEMBLY (GP5500)	1
17.**	F051808HCS	HEX HEAD CAP SCREW, 5/16-18 x 1"	3
18.*	F051814FWS	FLANGE WHIZ-LOCK SCREW, 5/16-18 x 1-3/4"	1
19.	F061607FWS	FLANGE WHIZ-LOCK SCREW, 3/8-16 x 7/8"	3
20.	F081305HCS	HEX HEAD CAP SCREW, 1/2-13 x 5/8"	2
21.	F081306HCS	HEX HEAD CAP SCREW, 1/2-13 x 3/4"	14
22.**	F081310HCS	HEX HEAD CAP SCREW, 1/2-13 x 1-1/4"	4
23.	F08LW	LOCKWASHER, 1/2"	16
24.	F08PW	PLAIN WASHER, 1/2"	2
25.			
26.		<b>-</b>	
27.			
28.			
29.			
30.			

- \* PARTS USED ON GP4000 ONLY
- \*\* PARTS USED ON GP5500 ONLY



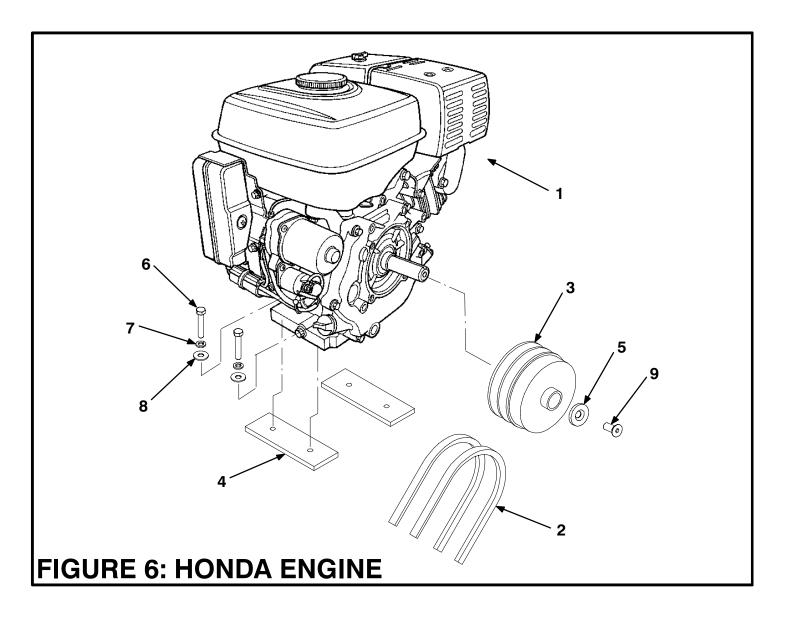
# **HONDA ENGINE ASSEMBLY - GP4000**

ITEM NO	PART NO	DESCRIPTION	QTY
1.	00031	MOUNTING BAR	2
2.	00032	KEY, 3/16" SQUARE x 1-5/8" LONG	1
3.	01182	V-BELT, A-34	1
4.	01444	ENGINE, HONDA GX160 5.5 hp	1
5.	16105	CENTRIFUGAL CLUTCH (S/N 1151054 and above)	1
	05999	CENTRIFUGAL CLUTCH (S/N 1151053 and below)	
6.	14993	COUNTERSINK WASHER	1
7.	F051814HCS	HEX HEAD CAP SCREW, 5/16-18 x 1-3/4" LONG	4
8.	F052408FSS	FLAT HEAD SET SCREW, 5/16-24 x 1" LONG	1
9.	F05LW	LOCKWASHER, 5/16"	4
10.	F05SW	PLAIN WASHER, 5/16"	4



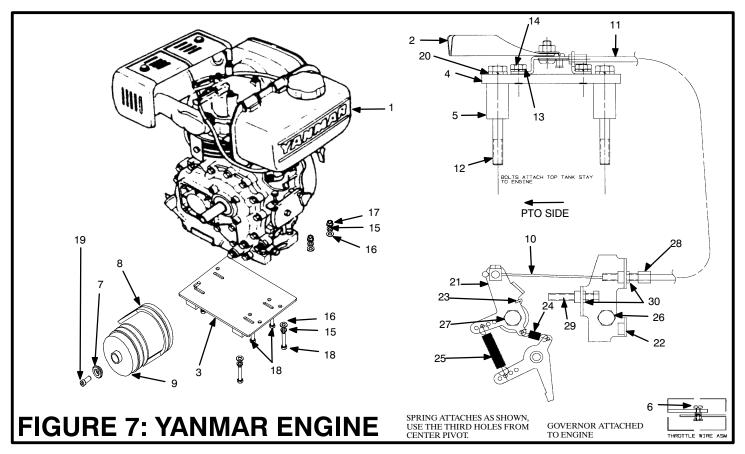
# **ROBIN ENGINE ASSEMBLY — GP5500**

ITEM NO	PART NO	DESCRIPTION	QTY
1.	17440	ENGINE, ROBIN EX27 9 HP	1
2.	05909	SPACER	4
3.	06469	SKYHOOK	1
4.	F061608FWS	FLANGE WHIZ-LOCK SCREW, 3/8-16 X 1"	4
5.	07932	TERMINAL, PIN STYLE FEMALE	1
6.	07877	CASING, LINED THROTTLE WIRE	1
7.	07662	WIRE, THROTTLE	1
8.	06361	KIT, CABLE CLAMP	1
9.	F061614HCS	HEX HEAD CAP SCREW, 3/8-16 X 1-3/4"	4
10.	F0616FN	HEX WHIZ-LOCK NUT, 3/8-16	4
11.			
12.			



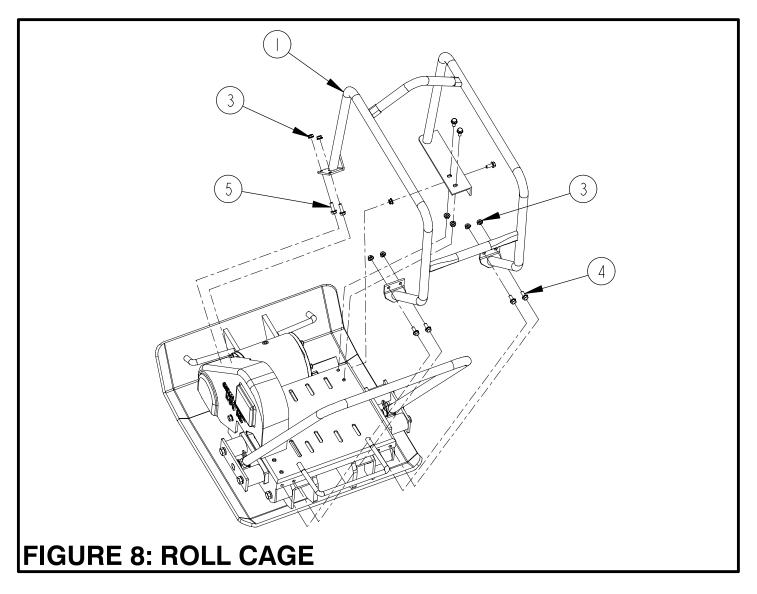
# **HONDA ENGINE ASSEMBLY - GP5500**

ITEM NO	PART NO	DESCRIPTION	QTY
1.	15674	ENGINE, HONDA, GX270 16.5 cu/in (270 cu/cm)	1
2.	05935	V-BELT, AX-35	2
3.	06934	DOUBLE GROOVE CENTRIFUGAL CLUTCH	1
4.	12968	MOUNTING BAR	2
5.	14992	COUNTERSINK WASHER	1
6.	F061614HCS	HEX HEAD CAP SCREW, 3/8–16 x 1-3/4" LONG	4
7.	F06LW	LOCKWASHER, 3/8"	4
8.	F06SW	PLAIN WASHER, 3/8"	4
9.	F072008FSS	FLAT HEAD SET SCREW, 7/16-20 x 1" LONG	1
10.			
11.			
12.			



## YANMAR ENGINE ASSEMBLY — GP5500

			1
ITEM NO	PART NO	DESCRIPTION	QTY
1.	00387	ENGINE, YANMAR L60E-D 6hp	1
2.	02198	THROTTLE CONTROL ASM	1
3.	02428	ENGINE ADAPTOR	1
4.	02558	MOUNT, THROTTLE	1
5.	02559	SPACER, 3/4 X 3/8 X 1.2	2
6.	05477	SWIVEL (included with item 2)	1
7.	05714	WASHER, PILOT	1
8.	05935	V-BELT, AX-35	2
9.	06934	CLUTCH, CENTRIFUGAL DOUBLE GROOVE	1
10.	07912	WIRE, THROTTLE	1
11.	07921	CASING	1
12.	08388	HEX HEAD CAP SCREW, M8 X 80MM LONG	2
13.	F04LW	LOCKWASHER, 1/4"	2
14.	F042004HCS	HEX HEAD CAP SCREW, 1/4-20 X 1/2" LONG	2
15.	F06LW	LOCKWASHER, 3/8"	8
16.	F06SW	PLAIN WASHER, 3/8"	8
17.	F0616LN	LOCKNUT, 3/8-16	4
18.	F061614HCS	HEX HEAD CAP SCREW, 3/8-16 X 1-3/4" LONG	8
19.	F072008SCS	SOCKET HEAD CAP SCREW, 7/16-20 X 1" LONG	1
20.	J0021008000	LOCKWASHER, 8MM	2
21.	Z11425266051	LEVER, SPEED CONTROL	1
22.	Z11425266112	BRACKET, ACCELERATOR	1
23.	Z11425266250	SPRING, RETURN	1
24.	Z11425066200	SPRING, SHORT	1
25.	Z11497066010	SPRING, LONG	1
26.	Z26476060142	BOLT, M6 X 14MM LONG	1
27.	Z26106060202	BOLT, M6 X 20MM LONG	1
28.	Z10210067080	BOLT, ADJUSTING	1
29.	Z11425066440	BOLT, ADJUSTING	1
30.	Z26757060002	LOCKNUT. M6	2



# **ROLL CAGE – GP4000–GP5500**

PART NO	DESCRIPTION	QTY
13882	ROLL CAGE (GP4000)	1
02483	ROLL CAGE (GP5500)	1
13907	KIT, GP4000 ROLL CAGE (includes items 1, 3, 4, & 5)	
02484	KIT, GP5500 ROLL CAGE (includes items 1, 3, 4, & 5)	
F0518FN	FLANGE WHIZ-LOCK NUT, 5/16-18	9
F051806FWS	FLANGE WHIZ-LOCK SCREW 5/16-18 X 3/4" LONG	7
F051808FWS	FLANGE WHIZ-LOCK SCREW 5/16-18 X 1" LONG	2
	MOUNT ROLL CAGE TO LOCATE HOLE POSITION IN THE BELTGUARD.  MARK POSITION. REMOVE ROLL CAGE AND DRILL TWO 13/32 DIA.	
	HOLES. REINSTALL ROLL CAGE WITH HARDWARE PROVIDED.	
	13882 02483 13907 02484 F0518FN F051806FWS	13882 ROLL CAGE (GP4000) 02483 ROLL CAGE (GP5500) 13907 KIT, GP4000 ROLL CAGE (includes items 1, 3, 4, & 5) 02484 KIT, GP5500 ROLL CAGE (includes items 1, 3, 4, & 5) F0518FN FLANGE WHIZ-LOCK NUT, 5/16-18 F051806FWS FLANGE WHIZ-LOCK SCREW 5/16-18 X 3/4" LONG F051808FWS FLANGE WHIZ-LOCK SCREW 5/16-18 X 1" LONG  MOUNT ROLL CAGE TO LOCATE HOLE POSITION IN THE BELTGUARD. MARK POSITION. REMOVE ROLL CAGE AND DRILL TWO 13/32 DIA.